

Abstract

Expressed Sequence Tags (ESTs) isolated from maize are disclosed. The ESTs provide a unique molecular tool for the targeting and isolation of novel genes for plant protection and improvement. The disclosed ESTs have utility in the development of new strategies for understanding critical plant developmental and metabolic pathways. The disclosed ESTs have particular utility in isolating genes and promoters, identifying and mapping the genes involved in developmental and metabolic pathways, and determining gene function. Sequence homology analyses using the ESTs provided in the present invention, will result in more efficient gene screening for desirable agronomic traits. An expanding database of these select pieces of the plant genomics puzzle will quickly expand the knowledge necessary for subsequent functional validation, a key limitation in current plant biotechnology efforts.